PROPOSAL 23 /5 /lace Reinvigorate MI Roads

A Comprehensive Policy and Marketing Solution to Increase Revenue to Fix Michigan's Crumbling Infrastructure

By:

Students Reinventing Michigan Competition

reinvigorate - impart vigor, strength, or vitality to.

Abstract

Michigan's roads are crumbling. This is an undisputed consensus among road agencies, government officials, and the general public. The Reinvigorate MI Roads plan provides a comprehensive blueprint for revenue generation in the State of Michigan to fully fund the infrastructure improvements Michigan needs. The plan gives a background on the necessity for additional state revenues that describes the decreasing revenue from current sources and the impact of inflation on those revenues. Reinvigorate MI Roads contains four proposals that were each evaluated based upon the five criteria of a good revenue source. Proposals that did not fit the five criteria were not considered. The benefits of immediate action to Reinvigorate MI

Roads are countless, and the greatest benefit can be summarized with a four letter word: jobs. No plan is complete without considering how it could be accomplished, and a description of how to market Reinvigorate MI Roads is included. It is time for an improvement in Michigan's infrastructure, and it is a necessary part of the state's reinvention to make it competitive in attracting and retaining businesses. It is time to Reinvigorate MI Roads.

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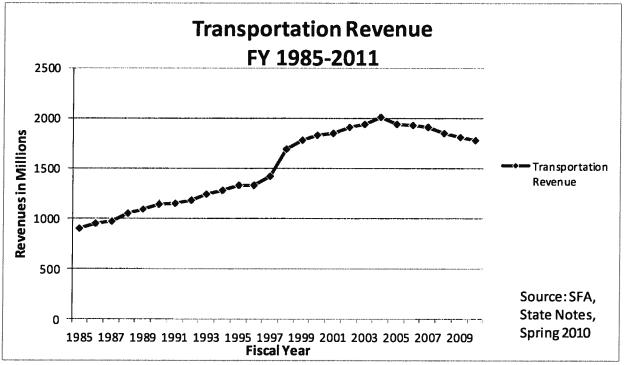
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I. The Proposal

Proposal Summary	Projected Potential Revenue
Increase Vehicle Registration Fees by \$120	\$973,490,760
Eliminate the three 10% reductions in the Vehicle Registration Fees	\$51,000,000
Direct all the sales tax on fuel to the Michigan Transportation Fund	\$800,000,000
Allow up to 25% of the Michigan Natural Resources Trust Fund Money to be used for infrastructure improvements in State Parks and Forests	\$25,524,600
Total Projected Potential Revenue	\$1,850,015,360

II. The Problem: Background

Michigan's roads are crumbling. Years of declining revenues have created a dire situation in this state that must be immediately solved. Continued inaction will exacerbate a decades old problem and cost more in the long run for the citizens of Michigan. Countless reports and studies have been issued in this state, all pointing to the same conclusion: something must be done. Proposals have been floated but no solid, concrete plan has taken hold as a consensus solution in the State Legislature. On Wednesday October 26th, 2011, the Governor issued a special message on infrastructure that seeks to begin the conversation on what can be done to repair Michigan's infrastructure. The good news is that the conversation has been started in Michigan and its citizens are beginning to understand that change is needed. The bad news is that change will not be easy or painless. Inevitably, changes will create winners and losers in the



process. The state, however, can no longer wait.

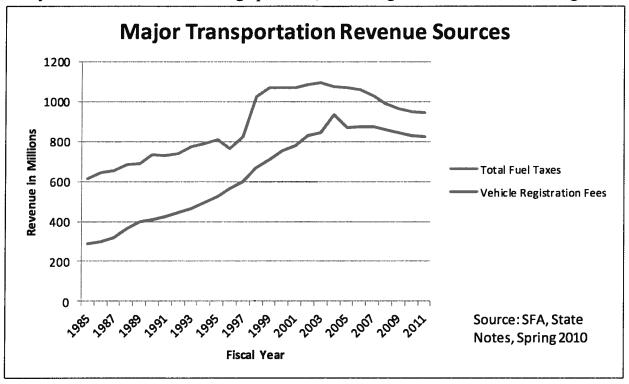
The revenues for Michigan's roads have been steadily decreasing over the past several years. The majority of payments for the construction and repair of Michigan's road system comes through the Michigan Transportation Fund (MTF). This is a State Restricted fund, meaning appropriations from this account may only be used for a limited scope of purposes that are clearly defined in State Statute. Established in PA 51 of 1951, the fund had revenues of about \$1.79 billion in FY 2010-2011, a slight increase of about 0.9% from the previous year, but a decrease of 12% since FY 04.² This reduction has been even more pronounced due to inflation. As can be seen in the chart above, funding has dropped precipitously since FY 03. Average yearly growth of the MTF from FY 89-97 was 3.4%, from FY 98-03 it was 2.8%, and

Snyder, R. (26 October 2011). A special message from Governor Rick Snyder: Reinventing Michigan's infrastructure: Better roads drive better jobs. State of Michigan Executive Office. Retrieved from http://www.michigan.gov/documents/snyder/102611InfrastructureMessage 367113 7.pdf>

Hamilton, W. E. (3 December 2010). *Transportation Needs and Revenue Distribution*. House Fiscal Agency. Retrieved from http://house.michigan.gov/hfa/PDFs/TransNeeds RevDistribution(Dec10).pdf>

from FY 03 - 09 it was -1.2%.³ The drop during the early 2000's has ceased to be a blip on the spreadsheet of the state, and has become a concerning trend that demands attention. The downward trend is due to a variety of factors because of the way that MTF revenues are sourced.

The revenues from the MTF have three primary sources: the gasoline tax, the diesel fuel tax, and vehicle registration fees. Gasoline taxes make up about 47% of MTF revenues, with the diesel tax accounting for 6% and registration fees making up the other 47%. This ratio has shifted since the 1980s when the gas tax accounted for 63% of the revenues and registration fees only 32%. As can be seen in the graph below, vehicle registration has been increasing at a



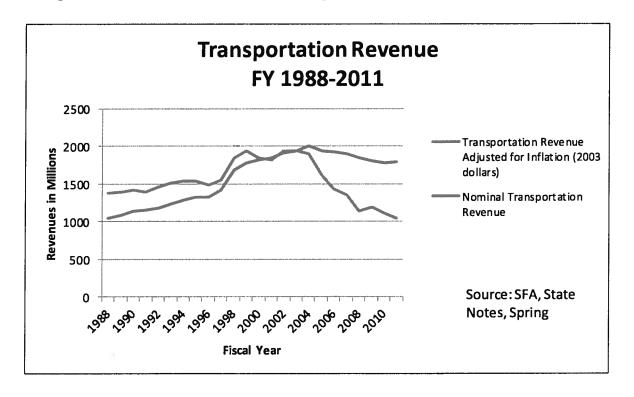
greater rate than the combined fuel taxes since the 1980s. This graph shows that fuel taxes, once a growing stream of revenue, have become stable and are beginning a steady decline. Fuel tax declines are caused by a variety of reasons including better fuel economy vehicles on the roads, less travel due to a stagnant state economy, and the increased use of hybrid and electric vehicles. Since the trends of fuel economy and better vehicles are not likely to reverse soon, even a booming economy would likely cause a smaller growth in fuel tax revenues than what has been realized in previous years.

The other major problem facing the impact of revenue collection on Michigan roads is inflation. The transportation revenue streams have not kept up with the pace of inflation and as such, they have lost much of their buying power. As can be seen in the graph below, the

³ Zin, D. (Spring 2010). *State Notes*. Senate Fiscal Agency. Retrieved from http://www.senate.michigan.gov/sfa/Publications/Notes/2010Notes/NotesSpr10dz.pdf

Zin, D. (Spring 2010). State Notes. Senate Fiscal Agency. Retrieved from <a href="http://www.senate.michigan.gov/sfa/Publications/Notes/2010Notes/Notes/Publications/Notes/2010Notes/Notes/Publications/Notes/2010Notes/Notes/Publications/Notes/2010Notes/Notes/Publications/Notes/2010Notes/Notes/Publications/Notes/Publications/Notes/2010Notes/Notes/Publications/Notes/Public

reduction in revenues since 2003, when coupled with inflationary increases, the revenue losses are more drastic than what they originally appear. In fact, when adjusted for inflation, transportation revenues have declined by about 7.8% per year from FY 03 - 09, for a total reduction of about 45.9%.⁵ This loss will not be easily covered, especially without action from the legislative and executive branches of state government.



Clearly, the State of Michigan has a revenue problem when it comes to the MTF and infrastructure funding. As a result, Michigan's roads and bridges have suffered. Reports have shown that Michigan roads are deteriorating, many of them more quickly than they can be reasonably fixed has resulted in more roads and bridges being classified as being in "fair" or "poor" condition. The increasing loss of quality in Michigan roads will increase the amount of future funding needed to fix Michigan's roads. According to the Governor's special message in October 2011, without making the drastic revenue changes our state needs, only 35% of Michigan's paved, federal aid eligible roads will be in good or fair condition by 2023 compared with 68% in 2010. The problem currently being faced by Michigan is not going away, and is only getting worse over time. A solution is needed immediately that will inject needed revenues into Michigan's road system that will reinvigorate Michigan's infrastructure and make our state competitive in attracting business.

III. The Solution: Reinvigorate MI Roads

⁵ SFA, State Notes, Spring 2010.

⁶ Michigan's roads crisis: What will it cost to maintain our roads and bridges? (19 September 2011). A report of the work group on Transportation Funding, of the House of Representatives Transportation Committee.

Proposal Criteria

The pivotal part of a potential solution the authors of this study tried to pursue was one that fit five criteria. Each aspect of the Reinvigorate MI Roads proposal was evaluated according to the five criteria of a good revenue source. Every aspect of this proposal encompasses the following characteristics:

- 1) Recurring
- 2) Stable
- 3) Ready
- 4) Sufficient
- 5) User Focused

The first and most important criteria was that the proposal must provide a recurring source of revenue. A one-time revenue stream might be helpful, but it would not produce the lasting effects needed to bring Michigan's infrastructure back to a level where it is comparable with our neighboring states. Too long has Michigan relied on "band-aids" such as one-time money and bonding to fix its financial troubles without addressing the underlying factors that cause such difficulties. These proposals are revenue streams that can be collected yearly, and most importantly, are stable.

The second necessary quality of a plan was stability. Stability is a desirable quality as it is something that had characterized the MTF prior to 2003. Wild fluctuations in revenues due to elastic tax bases are undesirable due to the difficultly in accurately predicting revenues. In addition, when unpredictably low revenue collections occur, the remainder of funding for the transportation programs would have to come from bonding or the General Fund of Michigan, with the General Fund expenditures being subject to the discretion of the legislature, resulting in an unstable revenue stream. The entirety of the Reinvigorate MI Roads plan is stable due to diversification and largely inelastic revenue sources.

The third aspect is that the plan must be politically viable and ready to be approved in today's political climate. Michigan cannot afford to wait, and so this study sought to provide a recommendation for Reinvigorating MI Roads that was ready now. The political aspects are discussed further in Section IV, that looks for potential ways to build public support. That is not to say that the Reinvigorate MI Roads plan will be easily accomplished, but rather it is possible. Raising revenues is never a politically easy move, since increased revenues to the State will by definition make at least some group of citizens worse off. This plan is ready because with proper political momentum and a solid grassroots lobbying effort, it could be successful. This is important since the sooner these plans can be implemented, the less it will cost the citizens of Michigan in the long run. Continued inaction will increase the severity of the problem and thus, increase the future revenues that would be required for a solution.

The fourth aspect of the proposal necessary was that the entirety of the plan must be sufficient to solve Michigan's problem. Each aspect of this comprehensive plan provides a source of recurring, stable, and ready revenue that will begin Michigan's rebuilding process. The total of the four proposals is \$1.8 billion. We believe this is a conservative estimate based upon a careful analysis of the projected revenues from each of these proposals. Reinvigorate MI Roads set a benchmark of necessary revenues at \$1.4 billion, with a goal of \$1.8 billion. These numbers are based upon recent studies done in Michigan on the increase in funding necessary to rebuild our infrastructure. The State Legislature launched a Work Group that released a report in September of 2011 detailing the revenue shortfall in the state. This report estimated that an increase of \$1.4 billion per year was necessary to achieve road quality goals.⁷ The funding level of \$1.4 billion would provide an adequate stream of revenue to begin repairing Michigan's roads and returning them to a higher quality without causing undue traffic burdens due to over construction. Another recent task force in Michigan also performed an analysis that predicted the best investment in Michigan infrastructure would require an addition investment of over \$2 billion annually.8 The authors of this plan chose a number that was below \$2 billion based upon the belief that an over \$2 billion increase in revenue would create diminishing marginal returns to state investment would outweigh the benefits of the additional investment. The goal set, \$1.8 billion, takes a middle ground between the two most recent transportation funding studies performed by the state and is most importantly, attainable. The goal gives the State Legislature and Governor a solid number goal to reach in considering any comprehensive transportation plan, and the Reinvigorate MI Roads plan reaches this goal.

The final aspect of the Reinvigorate MI Roads plan the authors considered was the user focus of revenue sources. The roadways of our State are currently funded through a system that is fair, because those who get the most use of our roadways pay for that use. Individuals who drive the most pay the greatest amount of taxes because they have to pay the highest fuel taxes, whereas those who drive little and cause little damage to the roads purchase the least amount of gas and, therefore, pay the smallest amount of taxes to the system. A user pays system is considered fair and was thus considered a necessary aspect of Reinvigorating MI Roads and ensuring the legislative viability of the proposals.

Registration Fees

The first and most politically viable option for increasing infrastructure funding in Michigan is to increase registration fees. The Governor proposed this plan in his special message on infrastructure in October 2011 and the authors feel that this solution fits all of the necessary criteria of a revenue source as part of the Reinvigorate MI Roads plan. Registration

Michigan's roads crisis: What will it cost to maintain our roads and bridges? (19 September 2011). A report of the work group on Transportation Funding, of the House of Representatives Transportation Committee.

Transportation solutions: a report on Michigan's transportation needs and funding alternatives. (10 November 2008). The report of the Michigan Transportation Funding Task Force. Retrieved from http://www.michigan.gov/mdot/0,1607,7-151-9623 31969-202856--,00.html>

fees are recurring, as they are collected yearly. It is not a one-time source of revenue and the state will continue to collect those revenues into the foreseeable future. This fee increase is stable, as can be seen by the above table that details registration fee revenues. From FY 1985 to 1997 registration fees averaged 5.2% growth, from FY 98-03 they averaged 4.9%, and from FY 03-09 they averaged -0.1%. This shows the stability of the fund since these revenues do not wildly fluctuate from one year to the next unless there are legislative changes to the amount of fees collected by the Department of State. This plan is ready and politically viable. The proposal raises substantial revenues that go towards solving Michigan's infrastructure problems, and does so in a user friendly way. This ensures that those who use the roads pay for that use, and ensures that those with electric vehicles are also paying for the damage their vehicles cause to the roads. Thus, raising registration fees fits the five criteria necessary to be part of the Reinvigorate MI Roads proposal.

There could be a slight reduction in registrations due to this plan, but the reduction is not estimated to have a tremendous effect on revenue. The presumed price elasticity of vehicle registrations is relatively small, meaning an increase in the price of registration will have a relatively small effect on the number of cars that are registered. To account for a possible decrease through individuals not registering their cars or selling existing vehicles or circumventing the system in other ways, the authors estimated a 1% reduction in registrations due to the fee increases. Total vehicle registrations in FY 09-10 were 8,194,367. After factoring in the estimated registration reduction and registration fee increase, the State would enhance its MTF revenues by approximately \$973,490,760 in the next year through the registration fee increase. This revenue source would remain stable into the near future, and would grow with the population growth of the state.

The arguments against raising registration fees typically focus on the impact that has on lower income citizens. The authors of this study took that into consideration, but felt that the lowest income citizens will not be negatively impacted from a registration fee increase. Public transportation in Michigan is funded through the Comprehensive Transportation Fund, and anything that helps earn more money for the MTF likewise helps fund the public transportation systems in the state because the MTF makes payments to the CTF. As a result, public transportation could improve and be more readily accessible to the citizens of Michigan. In addition, some would argue that the registration fee increase would provide too big of a financial blow to lower and middle income families. Therefore, a compromise could be reached in the Department of State changing how they charge registration fees by going to a monthly payment system for registration fees. This would allow citizens to pay off their registration fees over time while still ensuring increased state revenues. This would, however, impact the readiness of the

⁹ SFA, State Notes, Spring 2010.

Beck, M.J., Rose, J.M., and Hensher, D.A. (28 December 2010). *Behavioural responses to vehicle emissions charging*. Springer Science + Business Media, LLC. - It should be noted that the elasticity predicted in this study is calculated in a panel survey of respondents in Australia that admittedly has different market and consumer characteristics that drivers in Michigan. This study served as a starting point to reach an elasticity estimate for Michigan drivers.

Summary of fees collected and number of transactions. (2010). Michigan Department of State. Retrieved from http://michigan.gov/documents/sos/summary of fees collected 25683 7 208911 7.pdf>

proposal as the implementation of a payment system would take several years to properly establish until the revenue flow became consistent.

Elimination of Registration Discounts

The second aspect of the Reinvigorate MI Roads plan is to eliminate registration discounts. Currently, vehicle registration is reduced by 10% per year for the first three years after purchasing a car. These discounts are a carve-out in the registration system, and eliminating this loophole would increase transportation revenues by \$51,000,000 per year. This message meshes will with the Governor's push for fairness, and is a discount that probably does not currently have a significant impact on behavior.

The elimination of current registration discounts fits within the Reinvigorate MI Roads criteria because it is recurring since registration fees are collected yearly. It is stable, as the number of cars registered in Michigan does not fluctuate wildly from year to year. The revenue is ready since it could be simply done with legislation, and its is sufficient as part of the entire Reinvigorate MI Roads plan. Finally, it is user focused since it centers on those citizens of Michigan who drive, and does not directly impact those who get little use of the State's infrastructure.

Opponents might argue that these discounts are necessary to protect consumers, but they are a relatively small discount that does not go to great lengths to protect consumers. The benefits to this discount are minimal, and the state is losing money that could otherwise be going to maintain our crumbling infrastructure. This aspect of the Reinvigorate MI Roads plan holds the most promise for passage from a political standpoint, but it is only one step in covering the funding shortfall.

Direct All Sales Tax on Fuel to the MTF

Just as a good stock portfolio is diversified to prevent large and unexpected losses, a good revenue stream should also be diversified to protect against cyclical economic effects. Currently, not all of the taxes collected on fuel is sent to the MTF or directed to transportation. The 6% sales tax that is collected on fuel purchases in Michigan should be directed to the MTF as it was intended. This requires a constitutional amendment to the State Constitution, but a portion of it could be immediately redirected to the MTF through a change to the General Sales Tax act. Some studies have estimated that this change could provide an additional \$800 million in

Transportation solutions: a report on Michigan's transportation needs and funding alternatives. (10 November 2008). The report of the Michigan Transportation Funding Task Force. Retrieved from http://www.michigan.gov/mdot/0,1607,7-151-9623 31969-202856--,00.html>

Revenue estimates for this proposal are based upon numbers generated by the above report. It should be noted that the TF2 report advocates implementing this change over a three year period such that the \$51 million would not be realized immediately. This plan calls for the immediate elimination of these registration discounts that would allow the state to earn these additional revenues in the next fiscal year.

revenues to the MTF.¹³ This would provide a needed revenue injection to Michigan's infrastructure, without increasing taxes or fees.

The proposal to redirect the sales tax on fuel is a part of the Reinvigorate MI Roads plan because it satisfies the five criteria the authors used for evaluating proposals. The plan is recurring, because sales tax is collected at every transaction and will continue to be collected as long as fuel is purchased. The sales tax on fuel purchases is stable because of the generally inelastic nature of gasoline. The tax revenue from this source does not fluctuate wildly with the economy, although it is subject to more long term cycles. In addition, it will not decrease with gas prices; rather, it will increase as gas prices increase because it is a percentage of the price. This change is ready in a smaller amount, about \$125 million that could be done legislatively. With a constitutional amendment it would be available in the full estimated \$800 million which will contribute to the sufficiency of the overall plan. Finally, this is user focused since it will collect on the money that users of the roadways pay, and ensure that those funds go toward transportation. The user focus of this proposal is integral in building support for its change. Money that is paid in taxes on fuel should go towards roads, so the users of those roads know their money is being allocated properly.

Opponents to this proposal will argue that these changes will divert money away from other uses such as schools. The sales tax on fuel, however, should go towards transportation. It was the original intent of allowing a sales tax on fuel that was on top of the other fuel taxes imposed by the state. In addition, some would claim that this would harm CTF revenues, but we feel that a compromise could be reached such that the MTF could still realize increased revenues from the change and the CTF could be held harmless in the process. While this would have a negative impact on the School Aid fund and General Fund by an undetermined amount, it would fall into the Governor's call for fairness and would be user generated, which is part of a fair and efficient tax base. Realistically, this is the most difficult to achieve politically, but with an aggressive public relations campaign on the need for increased road funding, this proposal could pass with the support of the electorate.

Allow Up to 25% of MNRTF Funds to be Used for Infrastructure Improvements in State Parks and Forests

This idea is the most unusual proposal of the Reinvigorate MI Roads plan. While this proposal would also require a constitutional amendment, it could go a long way in ensuring extra future funding for Michigan's roadways. The vast acreage of state parks and forests owned by the state could use funding from the Michigan Natural Resources Trust Fund to go towards infrastructure improvements in and around our state parks and forests. The MNRTF was dedicated to protect our natural resources for the citizens of Michigan, and ensuring their accessibility to the citizens of Michigan should be a vital part of that fund. This fund could be

Transportation solutions: a report on Michigan's transportation needs and funding alternatives. (10 November 2008). The report of the Michigan Transportation Funding Task Force. Retrieved from http://www.michigan.gov/mdot/0,1607,7-151-9623 31969-202856--,00.html>

Zin, D. (2011). Senate Bill 351 Analysis. Senate Fiscal Agency. Retrieved from http://www.legislature.mi.gov/documents/2011-2012/billanalysis/Senate/pdf/2011-SFA-0351-A.pdf

expanded, therefore, to protect the resources for Michigan citizens by funding road improvement projects that increase their accessibility. Allowing up to 25% of the \$102,098,400 fund to be expended to this purpose yearly would allow \$25,524,600 to be used for roads. This could be a consistent source of rainy day type fund money that could go towards debt payments or other infrastructure payments in Michigan.

The advantages of this proposal are that the MNRTF will still be used to protect and promote Michigan's natural resources, while also providing for a new source of extra transportation funding. The fund would be recurring, since the MNRTF earns additional yearly revenues and since only 25% would be available for use on roads, it would be impossible to fully deplete the fund in a very bad year. The fund is stable, since the sale of natural resources remains fairly consistent each year. The proposal is ready, since the money is in the fund at present, and legislation could be introduced immediately to request a constitutional amendment. The funds would go toward making the Reinvigorate MI Roads plan a sufficient source of revenue. The fund is user focused since the sale of natural resources goes toward ensuring their accessibility of the general public. Opponents might argue that this is taking money away from natural resources, but in reality this will improve the accessibility of our natural resources which benefits all of the citizens of Michigan. The fund should not be opened up completely to be used as a transportation slush fund, but to be used conservatively to improve accessibility to Michigan's state parks and forests.

Undesirable Options

An unlimited array of possible funding solutions have been proposed by various stakeholders, and it is important to describe some of the more widely advocated proposals that this study does not seek to pursue. The primary proposal that should not be a part of the Reinvigorate MI Roads discussion is a sales tax increase. This could have a devastating effect on the Michigan economy at a time when economic recovery is still perilous. The primary motivation for reducing the jobless rate in our state is to increase consumer spending, something the legislature would be indirectly disincentivizing by increasing the sales tax. Michigan is in desperate need of a stable source of funding for transportation, and the sales tax is subject to massive cyclical effects that cause its revenues to vary widely in any given year. In addition, a sales tax is not user focused because everyone in the state pays the sales tax, regardless of how much they use the roads. Individuals who do all of their travel via walking or biking will be penalized for road repairs even though they don't cause any damage to the roads. Since a sales tax is not user focused or stable, the authors of this study determined that an increase in the sales tax is an undesirable option for providing increased infrastructure revenues.

The other proposal that has earned some consideration is the concept of tracking vehicle mileage, either through a GPS or regularly scheduled odometer examinations. There are a variety of problems with this proposal and it does not fit within the author's criteria of being ready. A GPS system is, to the author's knowledge, not available on a large scale for use. Establishing a tracking system and the bureaucracy to oversee such a system would take years

Department of Natural Resources Trust Fund: funding history. (24 August 2011). Senate Fiscal Agency. Retrieved from http://www.senate.michigan.gov/sfa/Departments/FundHistory/FHdnt web.pdf>

and its success is not guaranteed. While a regularly scheduled odometer examination might be feasible now, a new bureaucracy of oversight would still be required to administer the program that would come at a great cost to the state to establish. In addition, the invasion of privacy such systems could mean such a proposal is possibly unconstitutional, or at the very least, unlikely to be approved by a Republican controlled legislature.

Many proposals considered by the authors of this study involved creating a system of toll roads in the State of Michigan as part of increasing transportation revenue. While this method has been successful for many other states, this did not fit the criteria for consideration as part of the Reinvigorate MI Roads plan. First, Michigan is a state characterized by two peninsulas. Most other states that have toll roads are pass-through states such as Ohio and Indiana, where citizens are using their road systems to reach a destination that is not necessarily in those states. Michigan is not a pass-through state, in that the destination of most of Michigan's drivers is Michigan itself. This means individuals who would be paying tolls in Michigan would be one of two primary groups: citizens of Michigan or tourists. A toll system, therefore, would rely heavily on the residents of this state and increase the cost of visiting Michigan for tourists. Citizens of Michigan would begin finding alternative routes to avoid the toll roads, and visitors might chose to no longer vacation in Michigan because of the costs and burden of driving on the states toll roads. The other primary reason this proposal was not part of the Reinvigorate MI Roads plan is because it is not ready. Establishing toll roads requires massive infrastructure investment in establishing toll plazas and construction on every current highway exit. While bonding might be possible to cover these costs, the Department of Transportation is currently heavily bonded, making additional debt undesirable. In addition, converting highways to toll roads would cause Michigan to sacrifice precious federal matching funds and could result in Michigan being required to repay the federal government millions or billions of dollars of previous fiscal year's matching funds.

Finally, there are some who have proposed the elimination of the gas tax. This is typically proposed as part of a larger plan, but it is regardless an undesirable option without ensuring it is revenue neutral. This is not a criticism of Governor Snyder's plan, which seeks to transfer the tax burden to the wholesalers of gasoline as opposed to the retailers, but to criticize proposals that seek to eliminate the fuel tax entirely. The fuel tax, while it has seen reductions in revenue the past decade, is still a substantial source of revenue for the State of Michigan and to eliminate that would be foolish. The elimination of the gas tax would not have any sort of immediate economic stimulus effect, as demand for fuel is relatively inelastic. That is, it takes a drastic change in prices to elicit a substantial change in behavior. Elimination of the gas tax undermines the ability of a plan to raise the sufficient revenues needed to begin repairing Michigan's infrastructure.

IV. The Benefits: Jobs

The benefits to this program are enormous for the citizens of Michigan. The average commute time in the state of Michigan is around 24 minutes¹⁶, so it is not unreasonable to assume most people spend close to an hour on the road a day. That hour does not need to be compounded with the frustrations of bad roadways causing more traffic and wear and tear on the vehicle. Michigan is an economy that was founded on the automobile industry, as a largely manufacturing state the infrastructure funding needs to be some of the best in the nation, or at least proportionate to the amount of traffic that is seen every day.

Jobs

The increase in road funding would create jobs directly, by increasing the need for pavement and striping companies who would be subcontracted to reinvigorate the roadways. This would help with the unemployment rate, not just a quick fix, but generate jobs that will continue beyond this year and into the future, keeping jobs and money here in Michigan. Since the revenue streams are recurring, the jobs would continue for years into the future. The jobs created would be good paying middle class jobs, those that people can thrive on. The increase in funding would also indirectly create jobs, through the manufacturing of equipment to build roads, and also, with better roads and quicker commute times, our state as a whole can become more productive, spending less time in the auto-repair shop and more at work and on the go.

Infrastructure Improvement

The Reinvigorate MI Roads program will have lasting impact on infrastructure investment for years to come. Some studies predict that immediately and continually increasing funding form Michigan's roads would, within 20 years, cause at least 90% of roads to be rated in the "good" or "fair" category. The increase in road funding could also free up Michigan's transportation budget for funding other needs that are less advertised or dire, such as dredging in Great Lake's Harbors or focusing on railway transportation.

Safety

The rehabilitation of our roadways is also important to the public safety of the people of Michigan. Studies have shown that roadway condition is a contributing factor in more than half of American deaths resulting from motor vehicle crashes each year. The increasing deterioration of Michigan's roads puts more citizens at risk of accidents, injury, or even death. Poor road conditions deteriorate vehicles more quickly by increasing the likelihood of flat tires or other vehicle damage which create dangerous situations for drivers. The need to Reinvigorate

U.S. Census Bureau, 2010 American Community Survey. Retrieved from http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_10_1YR_GCT0801.US01_PR&prodType=table

Michigan's roads crisis: What will it cost to maintain our roads and bridges? (19 September 2011). A report of the work group on Transportation Funding, of the House of Representatives Transportation Committee.

Miller, T.R. and Zaloshnja, E. (April 2009). On a crash course: the dangers and health costs of deficient roadways. The Pacific Institute for Research & Evaluation.

MI Roads goes beyond simply the desire to have a comfortable drive, it impacts the safety and welfare of the citizens of Michigan. Clearly, this indicates a need for action.

V. The How-To: Building Public Support

Radio

Utilizing an advertising campaign that specifically targets users while they are seeing the roads first hand. Radio broadcast would be targeted in towns that feature a high volume of motor vehicle traffic, specifically those next to or that have major exits from US 23, Interstate 75, Interstate 94, The Lodge and Telegraph.

Social Media

Facebook and Twitter allow for a free form of advertisement that hits a wide variety of demographics be it age or race. Producing an attractive yet effective campaign is key to gaining the public opinion. The pages can be used to link to youtube.com videos that relay our message in a much more effective form.

Television

Effective marketing is done between the hours of 5pm and 9pm. The percentage of Americans that regularly watch television while eating dinner: 66. ¹⁹ Building an effective television campaign will convey the message to voters in the comfort of their own home. Decreasing the actual formality of the message will allow voters to relate to the bill.

Newspaper

Having bill sponsors write letters to the editor of major publications would show local support for the bill and allow voters to see the emphasis for the bill in their hometown. Garnering support from local elected officials and people of public recognition would be essential to gaining public support. Some sample letters to the editor can be seen in the appendix, and distributing them will help gain grassroots support for the Reinvigorate MI Roads plan.

Resource for Contacting Representatives

The best way for the people of Michigan to speak out about their displeasure with the current infrastructure is to contact their State Representative's office. Using the following link http://www.house.mi.gov/mhrpublic/ constituents can contact their appropriate State Representatives.

TV-Free America, 1322 18th Street, NW Washington, DC 20036. < http://www.csun.edu/science/health/docs/tv&health.html>

VI. The Next Step: Conclusion

As stated above, one of the major criteria for analyzing proposals was ensuring that they were ready, today, for legislative consideration. While there could be other funding solutions that are perfect, the authors of this plan refused to propose any changes that could not conceivably be passed by the State Legislature or the people of Michigan. The Republican Legislature in Michigan is adamantly opposed to tax and fee increases, so many of these proposals centered on redirecting revenue that should be part of the MTF. The registration fee increases are the major fee increases as part of this package, and a necessary aspect of any transportation plan. The registration fee increase aspect of the proposal has strong executive support which could help ensure its passage.

The Reinvigorate MI Roads plan is meant to provide a revenue solution for Michigan's infrastructure woes. It makes the assumption that the Department of Transportation is already implementing best practices that have internally reduced its cost of doing business as much as possible. Administrative changes within the Department of Transportation as well as consolidation of road commissions could and should be part of the solution to fixing Michigan's roadways. The Reinvigorate MI Roads plans provides a solid first step that is necessary to restoring our state's infrastructure. A state cannot operate efficiently on deteriorated and unsafe roads. This plan will start turning the tide from disinvestment in our infrastructure to active and adequate investment in our infrastructure with the goal of having some of the best roads in the nation. There might be some who feel that having adequate roads comparable with our neighboring states would be good enough, but we feel that Michigan should strive to be the best. It's time to Reinvigorate MI Roads.

VII. Appendix - Sample Letters to the Editor

Dear Editor,

Michigan roads need to be fixed. Plain and simple. I think I speak for my neighbors in my community and state when I say that I am tired of the road conditions in our state. My drive to work is filled with potholes, bumps, and cracks that deteriorate my car, and make my commute unbearable. I am calling on my Governor and State Legislature to Reinvigorate MI Roads.

Repairing our roads will not be easy. We have used up our one-time fixes, our quick fixes, and our budget gimmicks. We've kicked the can down the road, and now we've hit a pothole. It is time for bold action that will increase revenues to pay for necessary infrastructure updates. It's time to Reinvigorate MI Roads.

The Reinvigorate MI Roads proposal is a sensible solution that will find \$1.8 billion in money that will be solely dedicated to infrastructure and Michigan's roadways. We will have to pay a little bit more, but it is worth it. As the auto capital of the world, we should have an infrastructure that can carry those

vehicles we take pride in building without leaving them in disrepair. It is time to get our state back on track. It is time to make drastic and lasting changes. It is time to Reinvigorate MI Roads.

Sincerely,

Dear Editor,

Reinvigorate MI Roads. This is the rallying cry that started as a whisper, but is engulfing our state in a roar. Citizen's of Michigan have woken up to realize our roads are not getting better, they are getting worse. Continued inaction will only delay repairs and cost our state more in the long run. We need swift action to raise revenues, and we need it now. Michiganders have realized this, and support is building to Reinvigorate MI Roads.

I call on all of my friends and neighbors to join me with this call. If you have driven over a pot hole, crack, or bump in the past week, you know the difficulties our state is facing. If you are fed up with the status quo, then join me in asking our Governor and State Legislature to Reinvigorate MI Roads.

Sincerely,